

stated, is at once recognizable by the bright chestnut bands, which commence on each side of the forehead and are carried over the head behind the ears. I may also remark that the lower part of the back and upper surface of the tail are stained with red, which is not shown in my original figure of this Monkey (P. Z. S. 1892, pl. xl.).

2. On a Stag, *Cervus thoroldi*, from Tibet, and on the Mammals of the Tibetan Plateau. By W. T. BLANFORD, F.R.S., V.P.Z.S.

[Received May 2, 1893.]

(Plate XXXIV.)

In the course of Captain Bower and Dr. W. G. Thorold's adventurous journey across the Tibetan plateau from west to east, two specimens of a Stag were shot by the latter at a spot about 200 miles N.E. of Lhassa¹. These animals were killed in the snow amongst brushwood just above the forest, at an elevation of about 13,500 feet above the sea. Of one individual a complete skin, skull, and horns have been brought to England, and are now in the Natural History Museum; of the other, the head with the skin and horns has been preserved and has been left by Dr. Thorold in London, so that I have been able to examine both.

Last February I received a letter from Dr. Thorold in which he asked me to look at the specimens and let him know to what species I thought they belonged. Some time before this I had heard from Mr. Oldfield Thomas that the complete specimen had been received by the Museum but had been sent away to be stuffed. I, however, saw the head, which had been mounted, and although I did not like to come to any decided conclusion without having an opportunity of seeing the skin also, I was disposed to believe that the Deer was probably the same as that to an immature horn of which the name of *Cervus nariyanus* was given by Hodgson in 1851, and was clearly identical with the species of which the head was described and figured by Mr. W. L. Selater in 1889 (J. A. S. B. lviii. pt. 2, p. 186, pl. xi.), and which was shown to be allied to the Manchurian *C. dybowskii*.

For the last two months the skin has been in the hands of the taxidermists, but I have at length, by permission of Dr. Günther, been able to examine it; and I have now no hesitation in saying that I believe the Stag obtained by Dr. Thorold must be regarded as an additional peculiar species of the extraordinarily specialized mammalian fauna inhabiting the Tibetan plateau. The following are the principal characters:—

The animal is about the size of a Red Deer, *C. elaphus*. The

¹ I am indebted to Captain Bower for several of the details. The approximate position is in lat. 31° 40' N., and long. 93° 30' E.





height at the shoulder must have been about 4 feet, that measurement on the body over the curves to the withers having been recorded by Dr. Thorold as 4 ft. 5 in., and the length from the insertion of the tail to the nose 6 ft. 1½ in. The tail (with hair probably) measured only 4 inches. The ears are of moderate size and pointed, and measure outside in the mounted skin 9½ inches from the head.



Head of *Cervus thoroldi*.

The horns are distinguished at once by the want of the bez tine characteristic of the Elaphine group and found in the other Tibetan Stag *C. affinis*. There are five points on each horn (except one, which has only 4), and there can be very little doubt that this is the number characteristic of the adult. The beam is angularly bent at the insertion of the second tine (corresponding in position to the tres tine of *C. elaphus*), and above this is gradually curved back and presents the peculiarity that the upper four points and the upper part of the beam are nearly in a flat plane. Another conspicuous character is that (except in one horn which is slightly abnormal) the third tine exceeds all the others in length. The corresponding tine (4th) is generally the longest in the Wapiti,

and the upper part of each horn in the present animal much resembles that of *C. canadensis* in shape.

Each horn measures round the curve outside 38 inches, none of the four differing more than a quarter of an inch more or less. The girth above the burr is 5.25. The following are the measurements of the different tines on one horn in inches:—

Lowest or brow tine	7.5
2nd (=tres)	10.25
3rd	11
4th	4
5th	2.5

The coloration of the skin is very uniform brown, minutely speckled, scarcely paler on the lower parts, but much paler and ochreous buff on the small pygal disk which completely surrounds the tail, this latter being also pale rufous throughout. Ear whitish within. The muzzle, chin, and under surface of lower jaw white. The hairs of the body are stiff, long, and very coarse, and somewhat resemble those of the Musk-deer, being filled inside with a cellular pith-like tissue and having very small roots¹. The hair of the body is long, dark brown, except at the base which is whitish, and at the tips which are buff. The pale tips are wanting around the caudal disk, so that the latter appears to be surrounded by a dark band. The hair along the spine is directed forward from above the hips as far as the wither, where the anterior direction ceases abruptly. This character is quite peculiar.

The muffle or rhinarium occupies the whole area between the nostrils, and a rather narrower portion extends to the upper lip.

The skull presents a few peculiar characters, the most important of which have been already noticed by Mr. W. L. Scater. As a whole the skull is short when compared with other skulls of Elaphine Deer; the muzzle is especially short, but broad. The hinder part of the skull is distinctly lower and flatter than that of *C. elaphus*, the forehead continuing the line formed by the nasals and not curving upwards into a ridge between the horns. In this respect the present specimen shows some resemblance to Rusine and Pseudaxine skulls, but the evidence of affinity is small. The termination of the bony palate in the middle above the opening of the posterior nares is between the last molars, whereas in all other Deer of which I have examined the skull the opening is farther back.

But by far the most peculiar character, as already noticed by Mr. Scater, is the form of the nasals. These, a little way from the posterior termination, are fully twice as broad as they are in front, each bearing on the outer side a large rounded lobe-like expansion, so as to cover over the greater part of the lachrymal vacuity, which is much narrower than in Elaphine or Rusine deer.

¹ I am indebted to Mr. E. Gerrard for calling my attention to the very peculiar structure of the hair.

The following are measurements in inches :—

Basal length of skull, from anterior border of foramen magnum to anterior end of premaxillaries	13·4
Length from posterior border of occipital condyles to ditto	14·3
Breadth across posterior edges of orbits	6·8
Breadth across premaxillaries just above canines	2·9
Length of nasal bones	5·85
Greatest breadth of nasals between lachrymal vacuities	3·0
Breadth of nasals in front at suture between maxillary and premaxillary	1·45
Length of row of upper molars and premolars	4·3
Length of upper three molars alone	2·6

On the whole I can see no very close affinity between this and any known species of *Cervus*; the present species approaches some forms of the Elaphine group quite as much as any other Cervine type, perhaps more. I can see no evidence of Pseudaxine affinity, such as the horns might perhaps suggest. On the whole the species is probably as near to *C. cashmirianus* and *C. affinis* as to any other, though perfectly distinct from both.

As regards the name of the present species, some little difficulty arises. As already mentioned, it is most probable that the horn to which the name *Cervus nariyanus* was given by Hodgson (J. A. S. B. xx. 1851, p. 292, pl. viii.) belonged to a younger individual of the same species. This horn was said to have been brought from Ladák, it was 34 inches in length, and had four points, the two lower being more than 4 inches apart, so there was no bez tine. Judging by the figure¹, the horn was more massive than would be expected in a young specimen of Thorold's Stag. Mr. Hodgson remarked that "the Bhotiahs who brought this horn say it belonged to a very young animal, and that the species, which is proper to Gnári or Western Tibet, is larger than the Shou" (*C. affinis*). The Stag obtained by Dr. Thorold is considerably smaller than the Shou; there is, so far as is known, no Stag in Western Tibet, *C. cashmirianus* being limited to the Kashmir valley, at all events on the north and east of its range, and, as is well known, young examples of *C. elaphus*, and I believe of the Wapiti also, frequently want the bez tine; so that it is by no means impossible that the Ladák horn may have belonged to a young *C. cashmirianus* from Kashmir, to *C. yarkandensis* from Eastern Turkestan, or even to *C. eustephanus* (*C. canadensis*, var.) from the Thian Shan, Ladák being connected with all these regions by trade routes. The Bhotiah story was probably pure fiction.

There is, moreover, one very strong reason for not using the name

¹ The original specimen cannot be found in the British Museum, though Mr. Oldfield Thomas has searched for it. As no mention of it is to be found in the published catalogue of Mr. Hodgson's collections, it was perhaps not included in them.